REMARKS

These remarks and the accompanying amendments are responsive to the Office Action made final and dated February 5, 2009 (hereinafter referred to as the "Office Action"). At the time of the last examination, Claim(s) 7, 12, 13 and 15-17 were pending, of which Claim(s) 7, 12, 13 and 15 are independent. The Office Action rejected Claim(s) 7, 12, 13, and 15-17. Although the claims are not amended herein, a listing of the claims is provided for the Examiner's convenience.

Section 3 of the Office Action rejects Claim(s) 7, 12, 13 and 15-17 under 35 U.S.C. 103(a) as being unpatentable over United States patent number 5,875,215 issued to Dobrica (the patent hereinafter referred to simply as "Dobrica") in view of United States patent number 4,489,654 issued to Dann (the patent hereinafter referred to simply as "Dann") and in further view of United States patent number 5,440,267 issued to Tsuda et al (the patent hereinafter referred to simply as "Tsuda").

The Office Action concedes that Dobrica does not disclose means for generating one or more sync words for frame alignment in each of the slots, and means for establishing frame synchronization alignment by using the sync words included in the signal, and wherein the means for carrying out coherent detection carries out coherent detection by also using the sync words after the frame synchronization is established.

Dann relates to an information recording system with a recording process monitoring function. In the playback apparatus 253 shown in Figure 8 of Dann, the pilot signals are applied by the phase locked loops 105 and 205 to control the time base correctors 93 and 193 and contribute to eliminate time base errors from played-back information signals (see column 13,

line 4 through column 14, line 46 of Dann). With respect to this point, the Office Action states that "time base correction equivalent to frame synchronization".

With regard to "sync words", the paragraph on column 12, lines 8-16 of Dann discloses that "the sync word may be produced by periodically interrupting the pilot signal" at the sync word generator 75 in the recording apparatus 153 in Figure 6. The sync word is employed to "resolve ambiguities in the phase of the playback process brought about by such factors as a shrinking of the recording tape 13 between the recording and playback processes" (column 10, lines 56-63). With regard to usage of the sync word, the paragraph on column 15, lines 59-66 discloses that "the switch or read gate 218 is thus sequentially actuated by the reproduced and detected sync words 276, 278, 277 and 279 to apply sequentially the reproduced and time base corrected information signals derived from recordings 272, 273, 274 and 275 to the common output line 220 and components 260 to 262, for presentation of a reconstituted information signal or signal series at output 264."

Therefore, in Dann, the pilot signals are not used for frame synchronization or coherent detection. Rather, they are used for the time base correction. In Dann, the sync words are not used for frame synchronization or coherent detection. Rather, they are used for the playback of recorded information.

The time correction of Dann is different from frame synchronization or coherent detection in communication. The playback of recorded information of Dann is different from frame synchronization or coherent detection in communication. The Examiner states that "time base correction [is] equivalent to frame alignment". Even if the Examiner's remark were to be admitted, whereas the time correction of Dann is based on the pilot signals, the frame synchronization of independent claims 7, 12, 13, and 15 of the present application is carried out

using the sync words, instead of the pilot signals. Dann does not disclose or suggest frame synchronization using the sync words which is stated in independent claims 7, 12, 13, and 15 of the present application. Therefore, the logic of the Office Action does not stand scrutiny.

Additionally, Dann does not disclose that "one or more known pilot symbols and one or more sync words for frame synchronization in each of the slots" which is defined in independent claims 7, 12, 13, and 15 of the present application.

One of the characteristics of independent claims 7, 12, 13, and 15 of the present application is to carry out coherent detection by using the pilot symbols and the sync words after the frame synchronization is established. The Office Action admits that "the combined teachings of Dobrica and Dann do not specifically disclose wherein the means for carrying out coherent detection carries out coherent detection by also using the sync words after the frame synchronization is established" and additionally cites Tsuda for rejection.

Tsuda discloses that frame synchronization is established on the basis of a unique word (synchronizing word or framing). However, the Office ACtion confuses frame synchronization with coherent detection and explicates an incoherent logic. According to independent claims 7, 12, 13, and 15 of the present application, after the frame synchronization is established, the means for (or the step of) carrying out coherent detection carries out coherent detection by using the sync words (which were used for the frame synchronization) in addition to the pilot symbols. On the other hand, in Tsuda, the unique word (synchronizing word or framing) is used only for frame synchronization.

As discussed above, independent claims 7, 12, 13, and 15 of the present application are not obvious based on the combination of Dobrica, Dann, and Tsuda. The same is true of

dependent claims 16 and 17. Therefore, the 35 U.S.C. 103(a) rejection of the claims should be withdrawn, and favorable action is respectfully requested.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 5th day of June, 2009.

Respectfully submitted,

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